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Cited analysis of articles with keywords of 'Instructional Design' in DOAJ

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Abstract

The purpose of this study was to provide 158 Open-Access Magazine Guides, 158 of which were found in the magazines covered by the Directory of Open Access Journal (DOAJ; from the beginning until the end of 2016) subjects; number of authors; number of citations; distribution of keywords; and distribution of magazines by country, author and citations. The authors of the most cited articles, the number of citations and years, the number of citations the authors have taken on a country basis, and page numbers and bibliographic numbers are examined. It is believed that in the current literature there is only one study on instructional design and it is necessary and important because of its contribution to the field. The fact that the articles published in the electronic magazines published in the DOAJ Open Access Guide used the term 'Instructional Design' in the keywords to reach the relevant articles constitutes the limitation of this study. This research is a quantitative study in the screening model because it is a research approach that identifies the situation that exists in the past and the present. Content analysis was done because the articles were examined in terms of content. The titles were searched, and the obtained data were uploaded to the spreadsheet program and the tables were created. The data were analysed by interpreting the tables by calculating the frequencies and percentages.

Keywords: Citation analysis, DOAJ, instructional design, open access.

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1. Introduction

The overall aim of this study is to contribute to the scientific process change by making a content analysis of the studies on 'Instructional Design' in the Directory Open Access Journal (DOAJ) Open Access Journal Guide in 1995–2016. For this reason, instructional design, short information about Open Access, DOAJ and Citation Analysis will be given.

1.1. Instructional design

Teaching Design according to Fer (2011): It produces information about which teaching methods are appropriate for reaching different teaching outputs. It can also be about choosing the most appropriate situation for a teaching model, just as it is about designing an entire teaching model (Torres & Vasconcelos, 2017). In Instructional Design, it is planned by investigating the ways in which the instructional environments that guide learners' learning can be worked effectively, starting from the principles taught by the teaching science through theories (Hosseini, 2016). Therefore a simple definition: it is a decision-making process for the planning of teaching. This is an example of an architect building the most appropriate plan and project to build a building. The product that emerges as the result of instructional design, a set of learning groups and a way of teaching how to teach according to the selected model for a particular course content (Korkmaz, 2017; Melikoglu Eke & Usta, 2016). According to Isman and Eskicumali (2006), Instructional Design is a form of question of how to learn 'how to learn better' of the learning-teaching experiences decided by the program development.

Ozkan (2012) states that process analysis is the basis of process analysis rather than the product and that this process has four basic elements: 'To teach', 'What to teach', 'How to teach' and 'How to evaluate'. Teaching aims and objectives are important in the 'who will teach' the design, the teacher's knowledge of the student's characteristics and 'what is taught' in the process, and teachers' self-efficacy becomes crucial at this point (Caliskan & Ozcan, 2017; Erdogan & Kurt, 2016; Genc & Ozcan, 2017). According to Isman and Eskicumali (2006), discussing that the design process is a problem-solving process, instructional design models help instructors shape their problems during the instructional design process. Over the past 60 years, over a hundred different teaching design models have emerged in line with the advances in using technological tools in classrooms such as laptops, tablet and other mobile devices (Bevans, Donaldson & Al-Bataineh, 2015; Jiang, Zhuo & Chen, 2015; Kruse, 2008; Ozdamli & Tavukcu, 2016). The EDDIE and ASSURE instructional design models are not only the most well known, but they also have their own family names in Isman and Fer.

1.2. Open access

The scientific literature can be accessed, readable, recorded, copied, printed, scanned, fully contextually linked, can be transferred as written data, and is open to public for any legal purposes without financial, legal and technical barriers via the Internet (kutuphane.trakya.edu.tr) in which many institutions try to offer services through the Internet as well (Tufekci, 2013). According to Swan and Brown (2004), open-access journals have been implemented in response to high subscription prices since the early 1990s. The prices are not reflected to the readers; the magazines are applied in different modes of operation to meet the arbitration and publishing expenses. Open access journals are online and free of charge, and many are exempt from copyright and license agreements (transferred by Afzali, 2009).

1.3. Directory open access journal

DOAJ, the 'Open Access Magazine Directory' provides access to high-quality and prestigious journals as a community directory with open access, accessible online to all through the internet. Objectives: There are 9,494 journals from 128 countries (searchable at 6,698 articles) and 2,421,184 articles (as of January 2017) to encourage the use and influence of these journals by increasing the

ease of use and visibility of open access scientific and academic journals. DOAJ by Sweden's Lund University in 2003 300 open access, starting with the magazine, today science, technology, medicine, social sciences and humanities, covering all areas and comprise the number of open access journals in excess of 9,000.

DOAJ aims to be a one-stop-shop for open access journal users and aims to cover all open access scientific and academic journals using a comprehensive and content-assured quality control system (doaj.org). Academics and students global knowledge network in Turkey to performing access at the highest level, education and work in partnership to increase the support of library research ANKOS (Anadolu University Libraries Consortium) Presidency, thanks to his collaboration with Lund University 'http://www.doaj.org/doaj?uiLanguage=tr' is available at. All Turkey and Cyprus universities and higher education institutions are ANKOS candidate members (ANKOS general information).

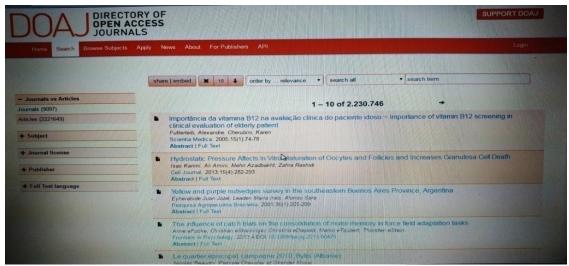


Figure 1. DOAJ search page

1.4. Citation analysis

One of the important features of quality scientific journals is the effect of the magazines in related fields. This effect is now quantitatively assessed by citation indexes and analyses. There are many ways to measure scientific effectiveness, but the most objective criterion is attribution analysis, which is often used for this reason. The citation not only reflects the quality of the article but also measures the influence of the work on which it is made.

According to Al and Tonta (2004), citation analysis researches are mostly done on articles published in scientific journals, and the graduate and doctoral dissertations are used in citation analysis research because of the content of the cited sources and the content of the references cited in scientific articles are related to each other.

Citation analysis has become a common parameter to evaluate the quality of research published in almost all scientific branches since the last 50 years.

Increasing competition in the field of research leads to the perception of citation analysis as an objective measurement tool in the evaluation of the quality of research conducted by researchers and research institutes. Citation analysis provides a measure of the relative effects of different studies, as well as a historical chart of the general state of core work in a discipline; providing an analysis of a phenomenon throughout the history from past to present is important for studies in terms of both quantitative and qualitative analysis and obtaining views of a specific topic from a special population is

really important (Al, 2012; Allahverdiyev & Yucesoy, 2017; Uzunboylu, Baglama, Ozer, Kucuktamer & Kuimova, 2017).

According to Eom (2004), common attribution analysis that maps intellectual building on a field can be done in many different ways (bibliographic mapping, author common attribution analysis, journal common attribution analysis and common word analysis). Two of the most basic of these are document common citation analysis and author common citation analyses (transferred by Duzyol, 2011).

2. Literature review

2.1. Related researchers

In the work titled 'Bibliometric Profiles of Tourism Publications published in Institute of Social Sciences (2000–2010)', 206 articles, by Zencir and Kozak (2012), there is a considerable increase in the number of articles published as a result of the examination made on the basis of publication year, university, article, publication language, research tour, number of authors, number of pages, number of used resources, number of domestic resources and number of foreign resources. The published articles differed in quality and the articles on tourism management and tourism marketing were at the forefront, while the number of studies in various disciplines increased in 2007–2010.

Nisha and Ahmad (2014)'s 'Open Access Analysis of Chemistry Academic Journal entitled' work in DOAJ. In this study, which deals with parameters such as subject coverage, 10-year growth rate of magazines, information distribution of country and publisher, and distribution of language knowledge to assess the contribution of open access journals in chemistry, each of the broad categories for better understanding and analysis of results is divided into separate subcategories.

In the article titled 'Research and Trends in Computer Assisted Language Learning in the Period of 1990–2008: Results of a Citation Analysis' published in the *Journal of Eurasian Journal of Educational Research*, by Uzunboylu and Ozcinar (2009), 'computer-aided language learning', 1309 document analysis of keywords close to English, 'Computer Assisted Language Learning' is ranked first with less than half; the number of documents increased from 26 in 1990 to 2008, up to 46 documents; 1,309 publications were made by 1,673 authors. While 274 different keywords are used, the keywords 'speech', 'learning systems', 'computer-aided language learning' are in the top three ranks. The number of citations increased rapidly after the year 2000 due to the widespread use of information and communication technologies and the researchers ERIC, EBSCOhost, Scopus and Web of Science are easily accessible.

In the study titled 'Results of Citation Analysis of Information Management in Education' by Uzunboylu, Eris and Ozcinar (2011), from an analysis of 125 studies on educational knowledge management analysed in the Web of Science, Education Researches Information Center and Science Direct between 1990 and 2008, the number of citations has been constantly increasing since 2005.

Ozcinar (2009) examined ERIC covering 29 years between 1980 and 2008, and 758 studies published in the *Journal of Australasian Educational Technology*, screened as a teaching design tool at EBSCOhost: article type, publication year, author, country, keywords, subject, language and year. Aside from 2004 and 2006, the number of articles related to teaching design increased from 1997, and nearly all of the studies were in English, more than half were made by US authors, and the lowest citation was in 1981 and the highest citation was in 2008. Between 2004 and 2008, more than half of the citations came to the conclusion.

Through 43 articles in the database of ISI Web of Science on the subject of computer-aided mathematics education by Uzunboylu and Cumhur (2015), seven master and five doctorate theses on the screening page of the National Thesis Center (YOK) and content analysis according to the data collection methods, thanks to the developments in the field of technology in the world, it is clear that

the use of computers has increased the importance of mathematics and education and thus the use of computers has become an indispensable element in education life.

Cetin (2016) explains that between the years of 1999–2010 and 2010–2014, the results of the study were not made or inadequate in many subjects between the periods; and between 1999–2010 and 2010–2014, different research topics were observed. While universities have been working on a variety of research topics, it has been seen that deepening of the underlying issues, the lack of specialisation and the introduction of various technologies among disciplines have begun to be used.

Soykan and Uzunboylu (2015) investigated new trends in mobile learning for researchers by reviewing 156 published content analyses published in the *World Journal on Educational Technology*, which were scanned with the keyword 'mobile learning' in Science Direct between 2009 and 2014. This field has made a lot of work: mobile technology and training environments are being used effectively based on the increased use of technology in education and this leads to new research results (Bradley, 2015).

Demirok, Besgul and Baglama (2016) examined how many of the theses are related to hearing impairment by examining 146 different types of theses based on various variables according to 146 graduate thesis content analysis methods conducted in the special education areas of Turkey on the screening page of the National Thesis Center (YOK). It has proven to be an insufficient number of arguments associated with hearing impairment.

Danju and Uzunboylu (2016) analysed 165 studies by scanning Taylor and Francis Group (Routledge) and ERIC databases on citizenship education and analysing the contents of the researches, the definition of citizenship education, the history, the literature search and application experiences, sample groups, type of research method and number of references, to set guidelines for the studies in this area. In curriculum education, there is little research on global citizenship and global human rights for democratic citizenship; it has been achieved that the curriculum should be developed according to global criteria for the courses to be given to the schools.

2.2. Aim and importance of this study

Citation analyses performed an analysis of the work done from the past to the present day by presenting the trends in the area in which it is being made and guiding the work to be done in the future in which areas it should be done. And, since no literature on instructional design has been found outside the study of Ozcinar (2009) in the current literature, it is believed that this work is necessary and important because of its contribution to the field.

In this research, the main aim is to examine the researches and trends on 'instructional design' in DOAJ between 1995 and 2016, the number of authors and citations of works, distribution of keywords, distribution of magazines according to country, author and citations, the authors of the top five works cited most frequently, the number of citations they have received and the years they have been performed, the number of citations received by the country, the topics of the published articles, the distribution of the keywords in the articles, the distribution of the pages of the publications, the distribution of the bibliographic numbers of the publications, the number of pages of the articles and the number of the articles produced by universities.

2.3. Limitations

The fact that the articles published in the electronic magazines published in the DOAJ Open Access Guide have reached the relevant articles using the term 'Instructional Design' in the keywords constitute the limit of this study. Although DOAJ started broadcasting in 2003, this study included dates prior to the start date; some magazines in this guide started their publication life before 2003.

3. Methods

3.1. Model of the research

This research is a quantitative study in the screening model because it is a research approach that aims to describe the past and present situation according to Karasar (2012). In addition, in this study, content analyses were carried out because the articles were also examined in terms of content. According to Tavsancil and Aslan (2001), content analysis is the classification of the data according to a certain purpose, summarisation, measurement of how often they are used and separating them by categories.

3.2. Collection of data

The DOAJ search page, dated January 11, 2017 (Figure 1), after entering the keyword 'Instructional Design' in the keywords section, reached 159 units in publishing the results of scans done any time restrictions; however, since one of them was in January 2017, a total of 158 studies were included in the study. The data obtained by creating the headings from the investigated topics were uploaded to Microsoft Office Excel under these headings, the frequency and percentages were calculated for interpreting and cross tables were prepared for interpretation. The recorded data were correctly checked thrice at different times for validity and reliability at the later stages of the data collection.

3.3. Analysis of data

The data were analysed by interpreting the tables generated by calculating the frequencies and percentages. This section contains comments on the result of the findings obtained by the content analysis of the 158 employees who were reached through the research with the keyword 'Instructional Design' in the DOAJ open access guide.

Table 1. The language distribution of the studies

Publish languages	Single	Two	Three	Four	Five
	language	languages	languages	languages	languages
Afrikaans	_	_	_	=	+Eng+Fre+Ger+Dut(1
)
German	_	+English (2)	_	_	+Eng+Fre+Dut+Af(1)
Bulgarian	_	+ English (1)	_	_	_
Chinese	_	+ English (9)	_	_	_
Indonesian	_	+ English (1)	_	_	_
Dutch	_	_	_	_	+Eng+Fre+Ger+Af(1)
French	1	+ English (5)	_		+Eng+Ger+Dut+Af(1)
				+Eng+Spa+Por(1)	
Engliih	116	_	+Sp+Cast(2)	+Spa+Por+Cast(5)	+Fre+Ger+Dut+Af(1)
				+Fre+Spa+Por(1)	
Italian	_	+ English (1)	_	_	_
Spanish	1	_	+Eng+Cast(2)	+Eng+Por+Cas(5)	_
				+Eng+Fre+Por(1)	
Castilian	_	_	+Eng+Sp(2)		_
				+Eng+Spa+Por(5)	
Polish	_	+ English (1)	_	_	_
Portuguese	_	+ English (2)	_	+Eng+Spa+Cast(5)	_
				+Eng+Fre+Spa(1)	
Russian	1	+ English (6)	_	_	_
Turkish	1	+ English (1)	_	_	_
Total (158):	120	29	2	6	1

Of the 158 participants in the study: 120 are monolingual (one from Turkish, Russian, French and Spanish, 116 from English); 29 of them are bilingual (all with English, Turkish (1), Italian (1), Indonesian (1), Polish (1) and Bulgarian (1)). Nine of them are in Chinese as well as English (9) articles. One article has been published in three different languages: English, Spanish and Castilian. One article has been published in English – Spanish – Portuguese and French languages; five articles are published in English, Spanish, Portuguese and all Castilian languages; a piece in English – French – German – Dutch and Afrikaans languages. As can be understood from Table 1, 154 of 158 employees were published in English (Table 1). Nearly all of the work is done in English because it is accepted as a global common language (tr.wikipedia.org).

Table 2. Distribution of studies by years, author, publication and citation counts

Years	Single	Two	Three	Four	Five	Eight	Total	Cited	Total
	author	authors	authors	authors	authors	authors	publicaton	articles (N)	citation
1995	1	-	-	-	-	-	1	_	0
1996	-	1	-	-	-	-	1	1	15
1998	1	_	_	_	_	_	1	1	26
1999	1	_	_	_	_	_	1	_	0
2000	1	_	-	-	-	-	1	1	431
2002	_	_	_	_	1	-	1	1	6
2003	1	1	_	_	_	_	2	2	2
2004	2	3	3	1	-	-	9	9	380
2005	-	2	-	-	-	-	2	2	91
2006	2	2	2	-	-	1	7	6	77
2007	5	6	4	2	-	-	17	16	830
2008	_	5	_	2	_	_	7	7	263
2009	7	3	5	-	-	-	15	13	493
2010	6	6	2	2	-	-	16	14	147
2011	4	_	5	1	-	-	10	9	251
2012	5	2	2	2	_	_	11	8	45
2013	5	2	2	1	1	_	11	9	103
2014	2	8	4	2	1	_	17	13	59
2015	8	5	2	1	-	-	16	7	37
2016	1	4	7	-	-	-	12	_	0
Total	52	50	38	14	3	1	158	119	3256

According to the number of works done, it was done in 2007 (830 citations) and 2014 (59 citations) with 17 works. Sixteen studies in 2010 (147 cites) and 2015 (37 cites) and 15 studies in 2009 (493 cites). In the 12th run, while the year 2016 (0 citation) was in the fourth rank, it was never cited as it was in 1995 (0 citation) and 1999 (0 citation) with the minimum number of articles. Despite the fact that 12 studies were conducted in 2016 (0 citation), the citation may be attributed to the recent completion of the citation. In 2007, it has been ranked as the first company with 17 employees, 16 employees with 16 references and 830 with the number of citations. While 13 out of 15 employees in 2009 had 493 citations, only one study in 2000 received 431 citations (Table 2).

Much of the research has been done by one and two authors. There are only six research studies done by eight authors, while six and seven are not. While most of the work is done in the last 10 years, this number does not fall below 10 for each year, but most of the publication was done in 2007 and 2014 (Table 2).

Table 3. Distribution of works by subject category (f)

Rank	Subject category of works	f	%
1	Special Aspects of Education	61	38.61
2	Social Sciences, Education (General)	28	17.72
3	Theory and Practice of Education, Social Sciences, Computer Science	10	6.33
4	Languages and Literatures	9	5.70
4	Technology (General): Industrial Engineering. Management Engineering:	9	5.70
	Information Technology		
6	Bibliography. Library Science. Information Resources	8	5.06
7	General Works	6	3.80
8	Education, Theory And Practice of Education	3	1.89
9	Other Subjects	24	15.19
	Total	158	100.00

Table 3 shows the distribution of the magazines according to the publications they published. 'SpecialAspects of Education', 'Social Sciences, Education (General)', 'Theory and Education Practice of Education, Social Sciences, Computer Science', 'Language and Literatures', 'Technology (General): Industrial Engineering, Management Engineering: Information Technology', 'Bibliography. Library Science. Information Resources', 'General Works' and 'Education, Theory and Practice of Education' categories made by 134 runs, accounted for 84.81% of the total work. The remaining 24 studies are in different subject categories.

Table 4. Percentage distribution of most used keywords

Rank	Keywords	f	%
1	Instructional Design	96	11.82
2	Distance Education	16	1.97
2	Online Learning	16	1.97
4	E-Learning	13	1.60
5	Blended Learning	7	0.86
5	Pedagogy	7	0.86
7	Distance Learning	6	0.74
8	ADDIE Instructional Design Model	5	0.62
8	Cooperative learning	5	0.62
8	Mobile Learning	5	0.62
8	Models	5	0.62
12	Cognitive (Load) Theory	4	0.49
12	Online Education	4	0.49
12	Instructional Design Model	4	0.49
12	Learning	4	0.49
12	Teacher Education	4	0.49
17	Open Educational Resources	3	0.37
17	Serious Games	3	0.37
17	Online	3	0.37
17	Educational Technology	3	0.37
17	Universal Instructional Design	3	0.37
17	Self-Learning	3	0.37
17	Motivation	3	0.37
17	Learning analysis	3	0.37
17	Learning Objects	3	0.37
17	Learning Environments	3	0.37
17	Learning Design	3	0.37
17	Learning Management Systems	3	0.37

17	Teaching System Design	3	0.37
17	Problem Based Learning	3	0.37
17	Higher Education	3	0.37
32	Twice Repeated Terms (44)	88	10.84
55	Once Repeated Terms (Others)	478	58.86
	Total	812	100.00

In the first place was the keyword 'Instructional Design' (96 times), while in the second were 'Distance Education' and 'Online Learning' (16 times), fourth 'E-Learning' (13 times), and fifth 'Blended Learning' and 'Pedagogy'. 'Distance Education' (16), 'Online Learning' (16), 'E-Learning' (13), 'Distance Learning (6)' which are the top 20 terms related to Education—Teaching. 'Mobile Learning (5)', 'Online Education (4)', 'Open Education Resources (3)' and 'Online (3)' also have a total of 8.13% (66; Table 4).

'Instructional Design' (96), 'ADDIE Instructional Design Model' (5), 'Instructional Design Model' (4), 'Universal Instructional Design' (3), 'Learning Design' (3) and 'Teaching System Design' (3) have a total of 22.17% (180; Table 4).

Table 5. The country of the most published magazines, number of author and citation

Rank	Journals (number of articles)	Country	Number of authors	Number Of cited
1	International Review of Research in Open and Distance Learning (21)	USA	41	1008
2	The Turkish Online Journal of Distance Education (16)	TR	40	205
3	Language Learning and Technology (9)	USA	17	721
4	Journal of Educational Media & Library Sciences (8)	China	13	54
5	Educational Technology & Society (6)	Canada	16	617
6	European Journal of Contemporary Education (5)	TR	11	1
6	In the Library with the Lead Pipe (4)	German	5	4
8	International Journal of Emerging Technologies in Learning (iJET) (3)	German	9	34
8	International Journal of Interactive Mobile Technologies (3)	Germen	8	9
8	Research in Learning Technology (3)	Israel	6	17
8	World Journal on Educational Technology (3)	Cyprus	8	47
12	ETD : Educação Temática Digital (2)	Brazilian	5	28
12	GMS Medizinische Informatik, Biometrie und Epidemiologie (2)	German	12	2
12	International Journal of Advanced Computer Science and Applications (2)	USA	4	3
12	International Journal of Designs for Learning (2)	USA	4	12
12	International Journal of Instruction (2)	TR	4	4
12	Journal of eScience Librarianship (2)	USA	6	1
12	Knowledge Management & E-Learning: An International Journal (2)	USA	6	13
19	Other Magazines (57)	29	215	393
	Total: 75 Journals	37	346	3256

The magazine International Review of Research in Open and Distance Learning (USA), which is in the first place according to the publication number of the articles in the journals, is also in the first place in terms of both the author (41) and the number of citations (1008). In the second place, with 16 articles, The Turkish Online Journal of Distance Education has 40 writers and 205 citations. Articles 8, 13 and 54 with reference to the author from China, the Journal of Educational Media & Library Sciences is ranked fourth. Five articles from other Turkish magazines, six articles by 11 authors and one citation the

European Journal of Contemporary Education; and in the 12th place, with two articles, four authors and four references, is the International Journal of Instruction (Table 5).

Language Learning and Technology ranked third with 9 articles, 17 writers and 721 citations. In the 12th rank were: the International Journal of Advanced Computer Science and Applications with two articles, 3 citations and 4 authors; the International Journal of Designs for Learning with 2 studies, 4 authors and 12 citations; Journal of eScience Librarianship with 2 articles, 6 authors and 1 citation; and 'Knowledge Management & E-Learning: An International Journal' with 2 works, 6 writers and 13 references—all of them are American magazines (Table 5).

According to the number of journals published per country, six journals ranked first with 38 works. Germany: four magazines in second place with 12 works; Turkey: three magazines 23rd with three ranks; Canada: four (16 studies) with a number of journals; China: five with eight works; Cyprus 3 work with 6; Israel is ranked seventh with three studies; and Brazil with seventh with two studies. As you can see, Turkey is the third place among the eight countries with the highest number of broadcasts and Turkey is the sixth place. Although Germany (4 journals, 12 studies) is in second place in terms of the number of journals, Turkey (3 journals), which ranks third, has 23 studies (Table 5).

Eleven magazines in the top five ranks belonged to five different countries, followed by America in developed countries as the number of citations, Germany and Israel in the fourth and fifth places after Turkey in the second place and Cyprus in the third place (Table 5). Even though Turkey is among the developing countries, it is a great success that it shares the first three ranks with the USA and Germany which are in the category of developed countries. In fact, Cyprus, which is a young country, is in the top six ranks as a good place for education.

Table 6. Top 10 most cited articles authors (countries) and publication years

Rank	Title of the article	Author/s (country)	Cited	Year
1	Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning.	Maureen Tam (Canada)	458	2000
2	Creating Effective Collaborative Learning Groups in an Online Environment.	Jane E. Brindley, Christine Walti, Lisa M. Blaschke (Canada)	267	2009
3	Universal Instructional Design Principles for Moodle. Using Digital Stories to Improve Listening	Tanya Elias (Canada) Dolores Ramírez Verdugo,	188	2011
4	Comprehension With Spanish Young Learners of English.	Isabel Alonso Belmonte (USA)	163	2007
	Bounded Community: Designing and Facilitating Learning Communities in Formal Courses.	Brent G. Wilson, Stacey Ludwig-Hardman, Christine L.		
5		Thornam, Joanna C. Dunlap (Canada)	157	2004
6	Help Options and Multimedia Listening: Students' Use of Subtitles and the Transcript.	Maja Grgurović, Volker Hegelheimer (USA)	146	2007
7	Setting the New Standard With Mobile Computing in Online Learning.	Yuhsun Edward Shih, Dennis Mills (Canada)	138	2007
	Beyond the Design of Automated Writing Evaluation:	Chi-Fen Emily Chen, Wei-Yuan		
8	Pedagogical Practices and Perceived Learning Effectiveness in Efl Writing Classes.	Eugene Cheng (USA)	121	2008
9	Interaction Equivalency in Self-Paced Online Learning Environments: An Exploration of Learner Preferences.	Jason F. Rhode (Canada)	110	2009
10	Vocabulary Learning in an Automated Graded Reading Program.	Hsien-Chin Liou, Hung-Tzu Huang (USA)	93	2007

In the first row, Maureen Tam (Canada) ranked first with reference to 458. The first three most cited articles originate in Canada, and most publications that take place within the first five magazines

are such as to confirm the quality of these magazines. Six of the top 10 most cited articles are in Canada, four in American magazines. These 10 articles include the first *International Review of Research in Open and Distance Learning* (five articles, USA), the third *Language Learning and Technology* (four articles, USA) and the fifth *Canadian Educational Technology & Society* (one article). It is believed that the most cited articles are due to having more water than in 2016 (Table 6), which is between 2000 and 2011.

Table 7. Countries and citation counts of publications

Rank	Author (number of articles)	Country	Citation counts
1	Aysen Karamete (3)	Turkey	4
2	Chiung-Sui Chang (2)	China	1
2	Ismail Ipek (2)	Turkey	5
2	Muhammad Ajmal Chaudry (2)	Pakistan	15
2	Omer Faruk Sözcü (2)	Turkey	2
2	Raby Francoise (2)	France	1
2	Tanya Elias (2)	Canada	252
2	Tel Amiel (2)	Brazil	45
2	Yael Kali (2)	Israel	23
2	Zehra Ozdilek (2)	Turkey	8
11	Others (325Authors) (Single Article Writers)	30	2900
	Total 335 Authors	37	3256

Ismail Ipek (five citations), Omer Faruk Sozcu (two citations) and Zehra Ozdilek (eight citations) are the Turkish writers who followed Aysen Karamete (four citations) with three publications in Table 7 with two publications. Two pieces to work with again the second place share T. Elias 252 citations from Canada, Brazil T. Amiel, 45, Israel Y. Kalinin 23, from Pakistan, M. A. Chaudry 15 citations, while still from China with works by two Chiung-Sui the Chang and Françoise Raby received a citation from France. In this study, 335 authors from 37 countries took a total of 3,256 citations.

In Turkey, Aysen Karamete received only four citations in three studies, although it ranked first in terms of number of articles (three items). Tanya Elias, ranked second with the highest number of works (two articles) in Canada, ranks third due to her 188 citations in 2011.

Table 8. Topic distribution of publications

Subjects	N	%
Instructional Design Models	10	6.33
Instructional Design	8	5.07
Distance Education	8	5.07
Online Course Design	7	4.43
Online Teaching Design	5	3.16
Language Learning	5	3.16
Designing Student Teaching Materials for Distance Education	5	3.16
Computer Assisted Instructional Material Design	4	2.53
Online Learning	4	2.53
Online Student Motivation	4	2.53
E-Learning	4	2.53
Software Development	4	2.53
E-Learning Design	3	1.90
Game Design for Educational Environment	3	1.90
	Instructional Design Models Instructional Design Distance Education Online Course Design Online Teaching Design Language Learning Designing Student Teaching Materials for Distance Education Computer Assisted Instructional Material Design Online Learning Online Student Motivation E-Learning Software Development E-Learning Design	Subjects N Instructional Design Models 10 Instructional Design S Distance Education 8 Online Course Design 7 Online Teaching Design 5 Language Learning 5 Designing Student Teaching Materials for Distance Education 5 Computer Assisted Instructional Material Design 4 Online Learning 4 Online Student Motivation 4 E-Learning 4 Software Development 4 E-Learning Design 3

13	Gagne's Instructional Design Mode	3	1.90
13	Concept map	3	1.90
13	Virtual Learning Environment	3	1.90
13	Educational Collaborative Instructional Design for Portable Devices	3	1.90
13	Video Usage	3	1.90
20	Open Education Resources	2	1.27
20	Brain-Computer Interface / s	2	1.27
20	Online Problem Based Learning	2	1.27
20	Course Design	2	1.27
20	Educational Technology	2	1.27
20	Teacher Training	2	1.27
20	Scenario Based Learning	2	1.27
20	Web Page Design	2	1.27
20	Web Based Instruction	2	1.27
20	Higher education	2	1.27
30	Others	49	31.01
	Total	158	100.00

In the first five ranks, shown in Table 8, the distribution of the subjects of the publications are as follows: 'Instructional Design Models', 'Instructional Design', 'Distance Education', 'Online Course Design', 'Online Teaching Design', 'Language Learning' and 'Designing Student Teaching Materials for Distance Education' are conducted in subjects. Topics of studies, especially instructional design, to train individuals with knowledge and skills suited to today's requirements; (Mobile) with software such as phone, tablet, computer, video used in conjunction with internet (mobile) and new approaches in education (Table 8).

Table 9. Universities, number of articles (f) and countries

Rank	Universities	Countries	f	%
1	Athabasca University	Canada	17	10.76
2	Anadolu University, Eskisehir	Turkey	10	6.33
3	University of Hawaii	USA	9	5.70
4	International Forum of Educational Technology & Society	Canada	8	5.06
5	University of Oklahoma, Oklahoma City	USA	7	4.43
6	Centre De Recherche İnter Universitaire Sur La Formation Et	Canada	5	3.16
	La Profession Enseignante			
6	Fatih University, Istanbul	Turkey	5	3.16
6	Tamkang Uni, Taipei Taiwan	China	5	3.16
9	Saint Francis Xavier University	France	4	2.53
9	Toulouse University	France	4	2.53
9	Thompson Rivers University	Kanada	4	2.53
12	Allama Iqbal Open University, Islamabad	Pakistan	3	1.90
12	Balikesir University	Turkey	3	1.90
12	Federal University of Rio Grande Sul (UFRGS), Porto Alegre	Brazil	3	1.90
12	Indiana University, Bloomington	Spain	3	1.90
12	Universität Kassel	German	3	1.90
12	Universitat Politécnica De Valencia	Spain	3	1.90
12	Zaragoza University, Zaragoza	Spain	3	1.90
19	12 Pieces (Two Publications)(24)		24	15.20
31	Others (Single Publication) (35)		35	22.15

Total: (65 Universities) 158 100.00

Most broadcaster universities rank among the top five in Canada (Athabasca U. 1 and fourth of the International Forum of Educational Technology & Society), Turkey (Anadolu U. second) and the USA (Hawaii U. third and fifth Oklahoma). There are a total of 65 universities listed in Table 9. In the top 12 places, Canada ranked fourth with 34 publications; Turkey ranked third in 2 universities in 18 publications; America (2) ranks third with 16 publications; Spain is ranked fourth with nine colleges in three universities; France is ranked fifth with eight colleges in two universities; China is ranked sixth with five colleges in one university; Pakistan, Brazil and Germany are ranked seventh in the universities with three publications (Table 9).

In addition, studies conducted on 18 universities from nine countries sharing the first 12 orders constituted 62.65% of the total publications, while 59 (37.35%) publications were published in 47 universities from the remaining 28 countries. Located on the first 12 places in Canada, the USA, China, France, Spain and Germany, the ULAKBİM's Cahit Arf Information Center page (cabim.ulakbim.gov.t) obtained 'Turkey Scientific Publications Performance Reports' according to the first in 10 ranks, while Turkey and Brazil ranked second 10. This is evidence that the findings were not random (Table 9).

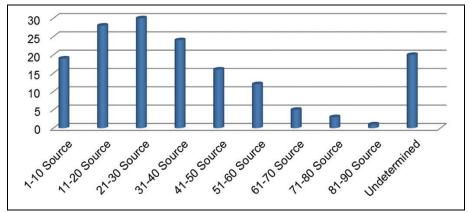


Figure 2. Number of bibliographies

As seen in Figure 2, half of the studies are in the first three ranks in terms of the number of bibliographies (11–40 sources): 21–30 sources in the first place (near 30), 11–20 in the second place and 31–40 in the third place. Only 81–90 sources were used in one of the studies. There are no sources for working close to 20.

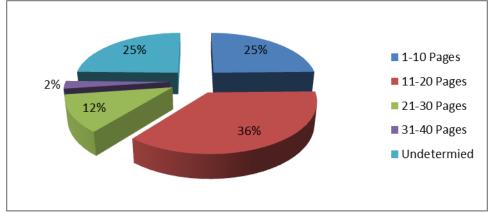


Figure 3. Number of pages

In Figure 3, where the number of works is shown, there are 11–20 pages in the first row (36%), 1–10 (25%) pages in the second row and 25 (25%) in which the number of pages can not be determined.

In the third row are 21–30 pages (12%) and in the fourth row, there are 31–40 pages with at least two studies (2%).

4. Discussion

Analyses made in this research show that the articles were published in the English language close to the entire publication language. Single and two-author studies are almost equal, together with twothird of all studies. The highest number of studies, the most cited studies and the highest number of citations were in 2007. Most studies (first and second place) were done in 2010, 2014 and 2015 with 2007. Three-fifth of the works, 'Education', 'Social Sciences', 'Theory and Practice of Education' and 'Computer Science' were done in the main categories. While 812 different keywords were used in 158 studies, the keywords 'Instructional Design' 'Distance Education', 'Online Learning' and 'E-Learning' share the first four orders. Magazines from America, Turkey, China, Canada, Germany, Israel and Cyprus shared the first eight places in 37 countries in publishing articles. Six of the top 10 most cited articles are from Canada and four from USA. Among 37 countries, Turkey should share the first two sequences with three works by one author and two works by the first and three different Turkish authors. 'Design', 'design models' and 'education via internet' studies are included in the first category in the subject category. Athabasca University (Canada), Anadolu University (TR) and the University of Hawaii (USA) are the top three universities that produce the most articles. The majority of studies have 21-30 bibliographies; and in most of the works (1/3), pages 11-20, at least of (0.02) is 31-40 pages, and the operation of the conclusions reached ¼ of the available bibliography. As in this case, the language (97.47%) published by Ozcinar (2009) (98.02%), Uzunboylu and Ozcinar (2009), and also the documents published by Uzunboylu, Eris and Ozcinar were in English.

In this work, one- and two-author works are almost at the same time; in addition, they are also reached in the work of Zencir and Kozak (2012) as a result of which they constitute more than half of the works. In Hotamisli and Erem (2014), individual studies are high, while one and two authoritative studies take the first two orders. Even though one and two written studies take the first two orders in Ulu and Akdag's (2015) study, the individual studies here are almost four and a half times the two written studies. Unlike other studies in Ozel and Kozak (2012) study, one- and two-author studies constitute 4/5 of all studies, with more studies being done by two authors.

'Education', 'Library Science' and 'Computer Science', which are in the first seven ranks in the subject category, are included in this study, using Ozcinar (2009) 'Instructional Design' keywords. In this study, as in the analysis study conducted by Ozcinar in 2009, this study also includes 'Instructional Design', 'Online Learning', 'Distance Education', 'Cognitive Load Theory', 'Models', 'Problem Based Learning'. Terms such as 'design' appear to have been used at high rates. These concepts are among the important concepts related to 'Education and Teaching' which is included in today's educational system and is developing day by day.

Again, it is seen that the topic of 'Instructional Design' in Ozcinar's (2009) study is also intense in this study in 2007–2016. 'Instructional Design' is an extension of the 158-item study covering the years 1995–2016; which is an indicator that you will stay on the agenda everywhere and at all times where it is still updated and education is the subject.

The fact that Canada's *Educational Technology & Society* magazine is ranked sixth with 19 studies and fifth with six studies in Ozcinar's (2009) study is evidence of the success of this magazine. Considering the number of citations per Al (2012), Turkey is the only country among the 30 countries with the highest number of publications with 116,296 publications (10th according to the number of publications). While the number of citations per publication of Turkey is 4.14 and that of Romania is 4.03, the highest citation rate among the EU countries is Denmark (13.78), followed by Denmark (13.52), Scotland (13.36), Sweden (12.87) and England (12.86).

In the period of 2010–2015 in the field of social sciences, when the annual production of scientific publications is examined, Turkey rises again in three rows with 16th, 18th, 17th, 19th, 18th and 17th

ranks. In total, the increase in the number of publications for 10 years shows that the USA (36.66%), England (21.94%), China (48%) and Turkey (24%) have increased (cabim.ulakbim.gov.tr).

5. Conclusion

Taking into consideration the results of citation and content analysis studies of both researchers and electronic open-access libraries in order to provide quality services to users together with effective and efficient use of resources and to provide users with high-quality services, it is necessary for researchers to maintain their knowledgeable level of the journals in their scope. Especially in the English language, where these studies are regarded as scientific languages, it is obvious that it will make a great contribution to every field through education. As long as each development path goes through education, the way in which education can continue in a planned and programmed way is also through well-designed educational programs.

Turkey and Cyprus's magazines are also included in the international open-access guides, while the languages of the publications are in English. By the increasing works and the publications in the English language, it is clear that Turkey and Cyprus will carry on to higher levels in the scientific world.

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